

## Note on taxonomy and typification of *Vigna hainiana* Babu, Gopinathan & Sharma (= *Phaseolus wightii* W. & A.)

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### Abstract

*Vigna hainiana* Babu, Gopinathan & Sharma, collected from north-western and eastern parts of India, has been studied. Characters for differentiating this species have been delineated. The type indicated previously for *V. hainiana* was incorrect; Wall. L. n. 5591 is the lectotype for this species.

*Vigna hainiana* Babu et al., is an important species akin to *V. radiata* var. *sublobata* (Roxb.) Verdc., the wild relative of mung bean- *V. radiata* (L.) R. Wilczek. The species had been described earlier as *Phaseolus wightii* W. & A. (1834), but its identity was obscure. Later workers assigned it to related taxa like *V. umbellata* (Thunb.) Ohwi & Ohashi (= *Phaseolus calcaratus* Roxb.) and *V. radiata* var. *sublobata* (= *P. sublobatus* Roxb.), or assigned new names to it e. g. *V. subramanianus* (Babu ex Raizada) M. Sharma (1985). Babu et al. (1985) set the records straight by attributing the name *V. hainiana* to it.

This species could be easily distinguished from *V. radiata* var. *sublobata* by the following characters—leaves softly hairy on both surfaces and the margins somewhat sinuate; flowers small (less than 0.4 cm) and without a horn on the keel; small and narrow pods (2.7—3.0 cm long and 0.3 cm broad) and seeds (0.25 by 0.2 cm). Some confusion was noted in the diagnostic features as described by earlier workers.

Haines (1925) while describing specimens from Bihar, identified it as *P. calcaratus* Roxb., but with the qualification, "it is doubtfully Roxburgh's plant which has quite glabrous pods". While Babu et al. (1985) have indicated that the pod can be "glabrous or setosely hairy", the present author's observations conform to that of Haines— "the very short appressed hairs on the pods very constant in character", and hence, diagnostic of the species. As regards the keel horn, "keel twisted to the left, with a short horn near the base on the left side" was reported for *P. wightii*. Haines could not determine if a long horn was present and Babu et al. reported the absence of a horn. From the

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present study, the latter observation was confirmed, and long a horn, as in *V. umbellata*, was absent. Also, seeds of *V. hainiana* were smaller than those of *V. radiata* var. *sublobata* as indicated by Haines (0.08" or less & 0.1—0.12" respectively).

Babu et al. (1985) considered *P. wightii*, and *V. hainiana* to be conspecific. But the epithet "wightii" had already been used in *Vigna* for a distinct species—*V. wightii* Benth. ex Baker (FBI, 2, 206, 1876) and was not available for this taxon. Hence, the new name, *V. hainiana*, was assigned to it.

However, Babu et al., (1985) confused the lectotypification of *P. wightii*. Wight 1836, deposited at Kew, is given as the type for both *P. wightii* and *V. wightii*, which wrongly implies that both are homotypic synonyms. Actually, *V. wightii* is an endemic taxon of Western Ghats of peninsular India belonging to subgenus *Plectrotropis*. *P. wightii* belongs to subgenus *Ceratotropis* and is widespread in the hilly tracts at lower altitudes (3-400 m), in India and Pakistan.

While describing *Phaseolus wightii*, Wight and Aronott (1834) cited two specimens: *Graham* in wall. L. n. 5591 and *Wight* Cat no. 726. Both of them match the original description of the species, of which *Graham* in Wall L. n. 5591 is selected as the lectotype of the species here.

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